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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/597,450	07/26/2006	Achim Grefenstein	12810-00325-US1	1310
30678 7590 12/23/2008 CONNOLLY BOVE LODGE & HUTZ LLP 1875 EYE STREET, N.W. SUITE 1100 WASHINGTON, DC 20006				
EXAMINER KASHNIKOW, ERIK				
ART UNIT		PAPER NUMBER		
1794				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/597,450

Applicant(s)

GREFENSTEIN ET AL.

Examiner

ERIK KASHNIKOV

Art Unit

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date 07/26/06
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 21 provides for the use of the moldings, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim 21 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

3. Claims 21 and 22 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
4. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since

the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claims 21 and 22 recites the broad recitation motor vehicles exterior sector, and the claims also recite in particular for roof modules, engine hoods, wheel surrounds, bumpers, door leaves, tailgate panels and other large area exterior parts" which are the narrower statement of the range/limitation.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-13, 15-18, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grefenstein et al. (US 2002/0045056) in view of Eisen et al. (US 5,527,602) and BASF AG (DE 10228376 with US 2005/0233130 relied upon as a translation).

7. In regards to claims 1 and 12 Grefenstein et al. teach composition for the substrate layer (claim 1) as presently claimed. Examiner points out that Acrylates are esters of acrylic acids and that styrene is a vinylaromatic monomer. Examiner points out that with regards to the article claims the phrase "reverse coated with a backing layer of plastic applied by an injection-molding, foaming, casting or compression-molding method" is a product by process limitation. It has been shown that even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process (MPEP 2113 and *In re Thorpe*, 777F.2d 695, 698, 227 USPQ 964, 966). Grefenstein et al. teach that the substrate layer is attached to a colored intermediate layer made of polycarbonate (paragraph 0113), and that the substrate layer has a thickness of 90-990 μm (paragraph 0132).

8. In regards to claim 3 as the substrate layer is made of the same materials in the same concentrations the physical properties would intrinsically be the same.

9. In regards to claim 5 Grefenstein et al. teach that the colorant layer has a thickness of from 50-400 μm (paragraphs 0120-0121).
10. In regards to claims 6 and 7 Grefenstein et al. teach the use of an adhesion promoter layer with a thickness of 5-100 μm which is used to bind the substrate layer to another substrate, and not the top layer, which one of ordinary skill in the art at the time of the invention would realize means that the adhesion promoting layer is on the side facing away from the top layer (paragraphs 0127-0128).
11. In regards to claim 8 Grefenstein et al. teach a total composite film thickness of 100 μm to 10mm (paragraph 0124).
12. In regards to claim 11 Grefenstein et al. teach that B is a mixture of styrene or α -methylstyrene mixed with acrylonitrile which would clearly include 100% α -methylstyrene and 0% styrene (paragraph 0079).
13. In regards to claims 15, 16 and 17 Grefenstein et al. teach that all components of the composite film are brought together in a molten (flowable) state by a coextrusion die process (paragraph 0137 and 0138). Grefenstein et al. also teach that a heated nip process may be used (paragraph 0140). Since the Grefenstein et al. teach the same materials as presently claimed formed in the same manner as presently claimed the layers would intrinsically be irreversibly bonded to one another.
14. In regards to claims 21 and 22 Grefenstein et al. teach that the composite may be used for car parts, such as wings and fenders which are also known as wheel surrounds, door trims, and skirts (paragraph 0142).

15. While Grefenstein et al. teach the substrate and backing layer of the substrate they are silent with regards to the thermoplastic polyurethane as well as reverse coating methods.
16. Eisen et al. teach composite sheets which comprise an ABS containing layer (comparable to the substrate layer of Grefenstein) and a thermoplastic polyurethane layer (column 1 lines 5-19).
17. In regards to claims 1 and 12 Eisen et al. teach it is known in the art to add a thermoplastic polyurethane layer to an ABS containing layer (column 1 lines 5-19), Eisen et al. further teach that the polyurethane is formed from aliphatic and cycloaliphatic diisocyanates, which would produce an aliphatic polyurethane (column 2 lines 28-35).
18. In regards to claim 2 Eisen et al. teach that the top layer is 0.02-0.2mm (20-200 μm) (column 5 lines 1-6), and as stated above Grefenstein et al. teach a substrate layer thickness of 90-990 μm .
19. In regards to claim 9 since Eisen et al. teach various thermoplastic aliphatic polyurethanes, the same materials used by Applicant's, the gloss would intrinsically be the same.
20. In regards to claim 10 Eisen et al. teach that the shore hardness of the thermoplastic polyurethane is less 55-75, which overlaps with Applicant's range (column 1 lines 5-15).

21. In regards to claim 13 Eisen et al. teach it is known to one of ordinary skill in the art at the time of the invention to modify polystyrene with butadiene in amounts within Applicant's ranges (column 5 lines 39-56).
22. One of ordinary skill in the art at the time of the invention would be motivated to modify the invention of Grefenstein et al. with that of Eisen et al. because the invention of Eisen et al. offers improved resistance to chemicals (column 1 lines 20-26) and offer good chemical stability (column 5 lines 24-26).
23. As stated above Grefenstein et al and Eisen et al. teach the presently claimed composite film, but are silent regarding the film being formed by reverse coating and reinforcing the backing material.
24. In regards to claim 1 and 18 BASF teaches that the composite films as claimed by Applicant's (claim 13) can be molded and formed using a reverse coating process involving injection molding (paragraph 0156).
25. In regards to claim 14 BASF teach it is known to use glass fiber reinforced plastics as the backing material (paragraph 0158).
26. One of ordinary skill in the art at the time of the invention would be motivated to modify the invention of Grefenstein et al. and Eisen et al. with that of BASF, because the invention of BASF offers improved surface quality at high temperatures (paragraph 0014).

27. Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grefenstein et al. (US 2002/0045056) in view of Eisen et al. (US 5,527,602) and BASF AG (DE 10228376 with US 2005/0233130 relied upon as a translation) as applied to claim 18 above, and in further view of Voiker et al. (DE 44 45 942).

28. As stated above Grefenstein et al, Eisen et al. and BASF teach the presently claimed composite film, but are silent regarding shaping the film using profile cuts.

29. Voiker et al. teach that it is known to one of ordinary skill in the art at the time of the invention to form and separate exterior automobile parts using a profile cut (ABS and claim 1). While Voiker et al. are silent regarding the profile cut being before or after a reverse coating it would be obvious to one of ordinary skill in the art to try the profile cuts both before and after. "When there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions, a person of ordinary skill has good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely the product.., of ordinary skill and common sense." *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1742 (2007).

30. One of ordinary skill in the art at the time of the invention would be motivated to modify the invention of Grefenstein et al, Eisen et al. and BASF with that of Voiker et al. because the invention of Voiker et al. offers precise and properly matching car components (first paragraph).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ERIK KASHNIKOW whose telephone number is (571)270-3475. The examiner can normally be reached on Monday-Friday 7:30-5:00PM EST (First Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie Shosho can be reached on (571) 272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Erik Kashnikov
Examiner
Art Unit 1794

/Callie E. Shosho/
Supervisory Patent Examiner, Art Unit 1794